



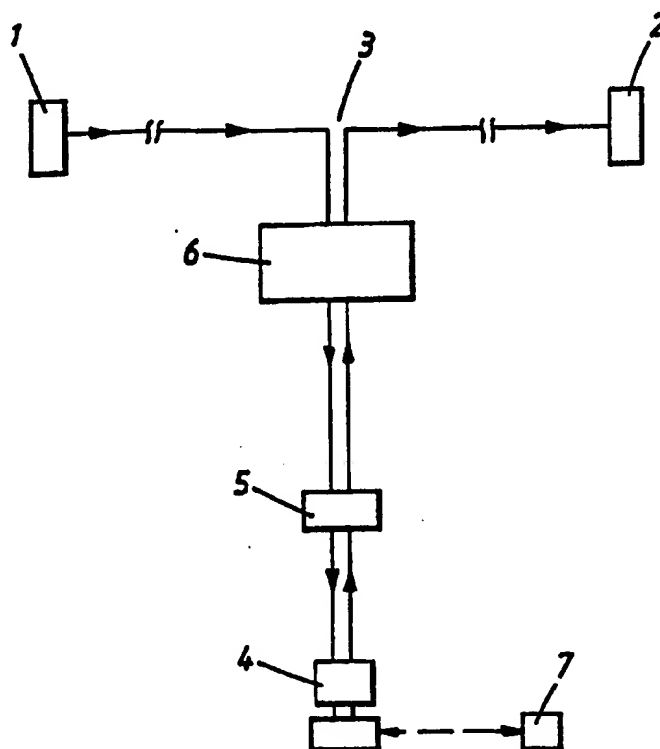
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/SE98/00077 (22) International Filing Date: 19 January 1998 (19.01.98) (30) Priority Data: 9700334-7                      3 February 1997 (03.02.97)                      SE (71) Applicant (for all designated States except US): GRATIS-TELEFON SVENSKA AB [SE/SE]; Riddargatan 23A, S-114 57 Stockholm (SE). (72) Inventors; and (75) Inventors/Applicants (for US only): ANDER, Carl [SE/SE]; Ragnaröksvägen 9, S-182 64 Djursholm (SE). PALMAEUS, Fredrik [SE/SE]; Valhallavägen 69, S-114 27 Stockholm (SE). (74) Agents: ÖRTENBLAD, Bertil et al.; Noréns Patentbyrå AB, P.O. Box 10198, S-100 55 Stockholm (SE).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

(54) Title: A METHOD RELATING TO TELEPHONE COMMUNICATIONS INCLUDING THE TRANSMISSION OF ADVERTISING MESSAGES

## (57) Abstract

A method relating to telecommunications wherein a call is connected between two subscribers, wherein the call is billed to a third subscriber, wherein the telephone of a first subscriber is connected to the telephone of a second subscriber via a standard telephone network, wherein the first subscriber dials a subscriber number, preferably preceded by a prefix, that leads to the third subscriber and dials a subscriber number that leads to the second subscriber, wherein the telephone network is caused to connect the call to a telephone network connected computer unit (4) that forwards the call to said second subscriber such as to connect said first subscriber with said second subscriber, and wherein the call between the first and the second subscriber is billed to the third subscriber, wherein advertisements are transmitted on the call connected between the first and the second subscriber. The invention is characterized in that when one of the first and the second subscribers enters a code or the like through the keypad of the telephone concerned during an ongoing call, said computer unit (4) is caused to sense said code; in that when sensing the code, the computer unit is caused to interrupt transmission of advertisements during the course of the call; and in that the computer unit is caused to bill the remainder of the connected call in accordance with fixed telephone charges.



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**A METHOD RELATING TO TELEPHONE COMMUNICATIONS INCLUDING  
THE TRANSMISSION OF ADVERTISING MESSAGES**

The present invention pertains to a method relating to telecommu-  
5 nications wherein a call is connected between two subscribers and  
the call is billed to a third subscriber, and wherein advertise-  
ments are transmitted during the course of the call.

Swedish Patent No. 9403793-4 teaches a method of forwarding and  
10 billing a telephone call wherein a first subscriber telephone is  
connected to a second subscriber telephone via a standard  
telephone network. The standard telephone network may be either  
a fixed network or a mobile telephone network.

15 According to this patent specification, a call connection is  
setup by virtue of the first subscriber dialling a prefix  
followed by a subscriber number that leads to a third subscriber  
and then dialling a subscriber number that leads to a second  
subscriber. This procedure results in the setup of a connection  
20 between the first and the second subscribers while billing the  
third subscriber for the call between said first and second  
subscribers.

The prefix and subscriber number causes the telephone network to  
25 connect the call through the telephone network to a network  
connected computer unit of the third subscriber. The prefix also  
causes the computer unit to forward the call to the second  
subscriber via said computer unit, so as to connect the first  
subscriber with the second subscriber.

30 According to the aforesaid patent specification, the computer  
unit is caused to transmit advertisements or publicity media at  
given time intervals during the duration of the call connected  
between the first and the second subscribers.

For instance, a chain of hamburger restaurants or a chain of gas stations may transmit during the course of the call connection advertisements relating to sales offers or ongoing campaigns.

5 In this case, the first subscriber is not billed for the call to the second subscriber, or is only billed for a part of the call, while a company or an organization is able to advertise its activities to the first and the second subscribers.

10 One problem with call connections of this kind is, of course, that the transmitted advertising messages interrupt the conversation held by the persons involved while the advertisement is transmitted. This can be very annoying to persons who do not wish to be constantly interrupted in this way.

15 Such a situation can occur when a subscriber utilizes the possibility of phoning free of charge, by setting up a connection with a second subscriber on a facility in which advertisements are transmitted but where the second subscriber has something  
20 important to say or discuss or when the call has developed along lines in which the persons involved no longer wish to be interrupted by advertising messages.

The present invention solves this problem.

25 The present invention is thus concerned with a method relating to telecommunications wherein a call is connected between two subscribers, wherein the call is billed to a third subscriber, wherein a first subscriber telephone is connected to a second  
30 subscriber telephone via a standard telephone network, wherein the first subscriber dials a subscriber number, preferably preceded by a prefix, that leads to the third subscriber and dials a subscriber number that leads to the second subscriber, wherein the telephone network is caused to connect the call to a

telephone network connected computer unit (4) that forwards the call to said second subscriber such as to connect said first subscriber with said second subscriber, wherein the call between the first and the second subscriber is billed to the third subscriber, and wherein advertisements or like messages are transmitted on the call connection between the first and the second subscriber. The method is characterized in that when one of the first and the second subscribers enters a code or the like through the keypad of the telephone concerned during an ongoing call, said computer unit 4 is caused to sense said code; in that when sensing the code, the computer unit is caused to interrupt transmission of advertisements during the course of said call; and in that the computer unit is caused to bill the remainder of the connected call in accordance with fixed telephone tariffs.

The invention will now be described in more detail with reference to an exemplifying embodiment thereof and also with reference to the accompanying drawing, in which Figure 1 is a block schematic that illustrates an arrangement for carrying out the present method.

Figure 1 illustrates an inventive arrangement for forwarding the billing a telephone call, wherein a first subscriber telephone 1 is connected to a second subscriber telephone 2 via a standard telephone network, generally referenced 3.

A third subscriber has a computer unit 4 that is connected to the telephone network 3. The computer unit 4 is adapted to sense a prefix dialled by a first subscriber and followed by a subscriber number that leads to the third subscriber. The third subscriber may have a local telephone exchange or switching centre 5 to which the computer unit 4 is connected. The telephone exchange 5 may be adapted to connect incoming calls to the computer unit in response to sensing the prefix. When sensing the prefix, the

computer unit 4 functions to forward the call, via the telephone network, to a subscriber number dialled by the first subscriber after the first-mentioned subscriber number and leading to a second subscriber, so as to connect the first subscriber with the second subscriber.

The telephone network 3 is also adapted to bill the call connected between the first and the second subscriber to the subscription of the third subscriber when sensing said prefix. In this regard, the whole of the cost of the call may be billed to the third subscriber or, alternatively, only a part of said cost and the remainder of the cost billed to the calling subscriber. The prefix is conveniently sensed in a telephone exchange or switching centre of a telephone station 6 belonging to the telephone network for billing purposes. Advertisements are transmitted on the call connection between the first and second subscribers at different time intervals.

In this regard, the computer unit 4 is arranged in communication with a database 7 that contains advertising material.

The database 7, or some other database, includes a plurality of advertising messages in the form of recordings on data media. These advertising messages are appropriately categorized in a suitable order. For instance, the advertising messages may be categorized according to age, sex, earnings and housing district of respective subscribers.

The computer unit is caused to collect advertising messages from the database in a predetermined order and transmit these messages on the call connection. Since the telephone numbers of the first and the second subscribers will reveal the districts in which said subscribers live, the computer unit is able to collect advertising messages that are local with respect to the areas or

districts in which the two subscribers are located. The subscribers may also be categorized in another database or in the same database, in which a profile of each calling subscriber that has a subscription with the third subscriber is stored. In this regard, the computer arrangement may be adapted to collect advertising messages that suit respective profiles of the subscribers concerned and transmit these messages to that subscriber.

The prefix may consist in the subscriber number of the third subscriber, or some other number or a code that includes the star character and/or the square character. Both subscriber number and prefix may be numerical or alphanumerical or solely consist of letters.

According to the present invention, when one of the first and the second subscriber enters a code or the like through the keypad of the telephone concerned during the course of the conversation, the computer unit is caused to sense this code. The code may be any appropriate code, such as a code \*99\*, i.e. including the star character or square character, or solely one or more digits.

According to the invention, the computer unit is caused to cease transmitting advertisements during the remainder of the conversation when sensing this code. The computer unit is then caused to bill the remainder of the call in accordance with preset tariffs.

The call may either be billed to one of the subscribers by the telephone operator whose telephone network was used for the call, or may be billed to one of the first and the second subscribers by the third subscriber.

In the former case, the computer unit will deliver a signal to the network of the telephone operator and therewith cause the

telephone operator to begin to time count the call in a conventional manner, whereafter billing is effected in a normal way via the telephone operator to whom the subscriber concerned subscribes.

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In the latter case, the computer unit is caused to commence a time count, whereafter the third subscriber bills the subscriber concerned in accordance with a given tariff. This would appropriately require a subscriber agreement between said subscriber and the third subscriber.

10

It is preferred that only that part of the call which is free from advertisement is billed.

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According to one preferred embodiment, the computer unit is caused to bill the calling subscriber after sensing said code.

20

According to one alternative embodiment, the computer unit is caused to bill the subscriber that dials the code on his/her telephone, after sensing said code. Thus, in this embodiment, it is the subscriber who wishes to interrupt the transmission of advertisements that will be billed for the call.

25

According to one preferred embodiment, when one of the first and the second subscribers again enters a code or the like through the keypad of the telephone concerned during the course of the call, the computer unit is caused to sense said code and, in response to sensing said code, again caused to transmit advertisements on the call connection.

30

This means that transmission of an advertisement can be prevented during a given part of the call.



When an advertisement is again transmitted on the call connection, the computer unit is caused to bill the third subscriber for the continued call for the duration of the advertisement transmission.

5

Although the invention has been described with reference to exemplifying embodiments thereof, it will be obvious that modifications can be made. For instance, it will be evident that the codes may be configured in different appropriate ways. It will also be evident that entering of the code sensed by the computer unit can be followed by voice messages. For instance, after sensing the first-mentioned code which stops the transmission of advertisements, the computer unit may be caused to send a voice message to the effect that "The call will be billed to the calling subscriber as from now".

10

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It will therefore be understood that the invention is not restricted to the aforescribed exemplifying embodiment and that modifications can be made within the scope of the following Claims.

20

## CLAIMS

1. A method relating to telecommunications wherein a call is connected between two subscribers, wherein the call is billed to a third subscriber, wherein the telephone of a first subscriber is connected to the telephone of a second subscriber via a standard telephone network, wherein the first subscriber dials a subscriber number, preferably preceded by a prefix, that leads to the third subscriber and dials a subscriber number that leads to the second subscriber, wherein the telephone network is caused to connect the call to a telephone network connected computer unit (4) that forwards the call to said second subscriber such as to connect said first subscriber with said second subscriber, and wherein the call between the first and the second subscriber is billed to the third subscriber, wherein advertisements are transmitted on the call connected between the first and the second subscriber, **characterized** in that when one of the first and the second subscribers enters a code or the like through the keypad of the telephone concerned during an ongoing call, said computer unit (4) is caused to sense said code; in that when sensing the code, the computer unit is caused to interrupt transmission of advertisements during the course of the call; and in that the computer unit is caused to bill the remainder of the connected call in accordance with fixed telephone charges.

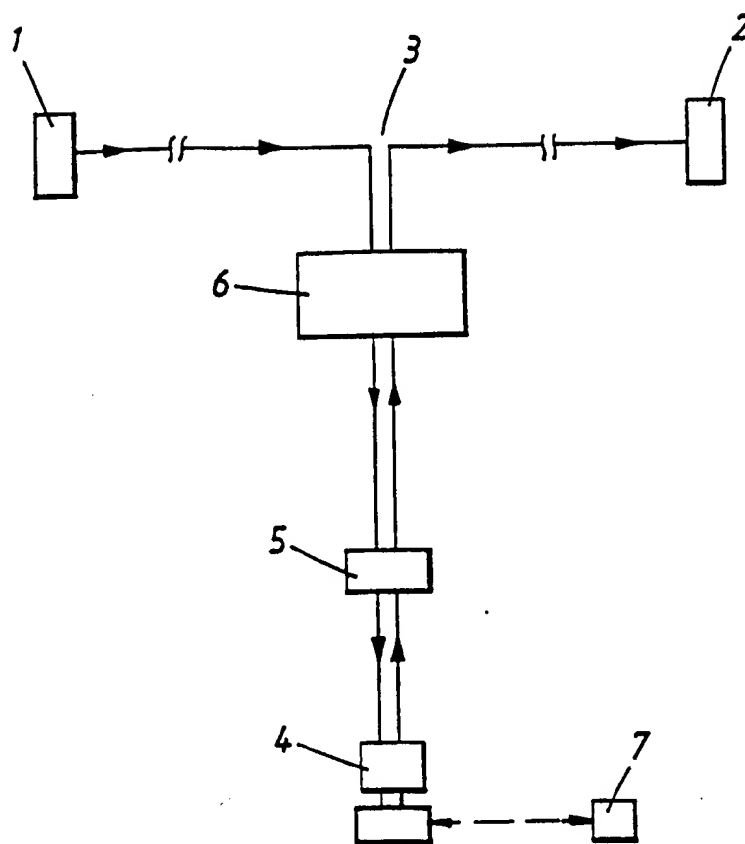
2. A method according to Claim 1, **characterized** by causing the computer unit (4) to bill the calling subscriber subsequent to sensing said code.

3. A method according to Claim 1, **characterized** by causing the computer unit (4) to bill the subscriber that entered the code, subsequent to sensing said code.

4. A method according to Claim 1, 2 or 3, characterized in that when one of the first and the second subscribers again enters a code or the like through the keypad of the telephone concerned during the course of the call, the computer unit (4) is caused to sense said code and, in response to sensing said code, again caused to transmit advertisements on the call connection; and in that the computer unit (4) is caused to bill the third subscriber for the continued call for the duration of advertisement transmission.

1 / 1

Fig. 1



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 98/00077

## A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04M 15/00, H04M 3/42, H04M 3/54

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: H04M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 9614706 A1 (ANDER, CARL), 17 May 1996 (17.05.96), see whole document  --	1-4
Y	US 5146491 A (DAVID SILVER ET AL), 8 Sept 1992 (08.09.92), column 1, line 15 - column 2, line 47  -- -----	1-4

☐ Further documents are listed in the continuation of Box C.
 ☒ See patent family annex.

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